## Washington State Department of Labor and Industries

Ron Fuller, Chief Electrical Inspector

Vol. 7 No. 3

March 2004

## Public Hearings For Proposed Changes To The Electrical WAC Rules

May 3, 2004—10:30 AM

May 4, 2004—10:30 AM

Labor and Industries Building, Room S119 7273 Linderson Way, **Tumwater** 360-902-6105

Labor and Industries, Room MLAK 1 3001 W. Broadway Ave, **Moses Lake** 509-764-6900

#### We Must Receive Written, E-Mailed, Or Faxed Comments No Later Than May 4, 2004

Mailing Address: Chief Electrical Inspector

Department of Labor and Industries

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The proposed rule changes will be available online soon (when the code reviser releases them) at: <a href="http://www.lni.wa.gov/TradesLicensing/Electrical/whatsnew/">http://www.lni.wa.gov/TradesLicensing/Electrical/whatsnew/</a> under the <a href="http://www.lni.wa.gov/TradesLicensing/Electrical/whatsnew/">2003-2004 Electrical Rule</a> (WAC) Development link. Copies of the proposed rules will also be available at the public hearings.

## Continuing Education Class/Instructor Approval – Seeking Contractor's Proposal

The department is searching for a contractor to assume the responsibilities for approving continuing education classes and instructors. The Chief Electrical Inspector will accept proposals until April 15, 2004. The Electrical Board currently approves about 250 to 300 classes each year. The request for proposal is available online at: <a href="http://www.lni.wa.gov/TradesLicensing/Electrical/whatsnew/">http://www.lni.wa.gov/TradesLicensing/Electrical/whatsnew/</a>.

#### • Previous *ELECTRICAL CURRENTS* Articles

The department adopted the 2002 National Electrical Code (NEC) in May of 2003. Many changes were incorporated into the 2002 revision. Installers should be aware that previous articles in the *ELECTRICAL CURRENTS* might no longer be applicable. You should verify that revisions have not changed the interpretations in previous *ELECTRICAL CURRENTS*.

## Outdoor Hot Tubs And Spas

NEC 680.40 requires spas and hot tubs comply with Part I and Part IV of Article 680. NEC 680.42 specifies that spas and hot tubs installed outdoors must also meet the requirements of Part II-Permanently Installed Pools. By reference, NEC 680.42 requires any spa or hot tub installed outdoors to comply with the same requirements as permanently installed pools. In 2002, NEC Article 680 was completely restructured. In the restructuring, the requirements for area lighting, receptacles, and equipment (NEC 680.22) were written into Part II and now apply to outdoor hot tubs and spas.

This interpretation differs from previous interpretations made regarding outdoor spas and hot tubs. Previous interpretations were based on the 1999 edition of the National Electrical Code.

## Continuing Education Class And Instructor Approval

EFFECTIVE IMMEDIATELY, new continuing education classes and instructors must meet the following guidelines.

- Industry related classes must be based on:
  - o Codes or rules included in the NEC, chapter 19.28 RCW, or WAC 296-46B;
  - o Electrical theory based on currently published documents that are readily available for retail purchase; and/or
  - o Materials and methods that pertain to electrical construction, building management systems, electrical maintenance, or workplace health and safety.

- Code update classes must be based on the latest adopted version of the NEC and must specify the NEC articles to be addressed in the class presentation.
- RCW/WAC update classes must be based on the latest adopted versions of the chapter 19.28 RCW and/or WAC 296-46B.
- The minimum allowed length of a class is four hours. The maximum allowed credit for a class is twenty-four hours. Class length must be based on two-hour increments (e.g. 4, 6, 8, etc.). Class length must be based on the following:
  - o Classroom instruction will be based on the total hours the individual is in the classroom.
  - o Correspondence instruction will be based on a written examination (i.e. twenty-five questions will equal two hours of classroom instruction).
  - o Internet instruction will be based on a written examination (i.e. twenty-five questions will equal two hours of classroom instruction).
- Examinations must not direct or point the individual to a correct answer or reference. Individuals must be responsible to determine the correct answer without the assistance of the sponsor. To successfully complete a correspondence or Internet class, a participant must score at least 70% on the examination required for the class.
- Class material must include supplementary written instruction material appropriate to the type and length of the class; and if the class is code update and is provided via correspondence or internet, the sponsor must provide the individual with a nationally recognized, copyrighted, publication that covers all changes to the NEC. Class material may include: supplementary Internet material, supplementary texts or other material as appropriate.
- Instructors seeking approval must meet one of the following minimum requirements:
  - o Have a valid Washington General Administrator's certificate or General Master Electrician's certificate; and have appropriate knowledge of and experience working as an electrical/electronic trainer.
  - o Be accredited by the Washington Work Force Training and Education Coordinating Board. The instructor's normal duties must include providing electrical/electronic education.
  - o Be a high school vocational teacher, community college, college, or university instructor. The instructor's normal duties must include providing electrical/electronic education.
  - o Work for and be approved by a manufacturer of electrical products to teach electrical continuing education.
  - o Work for the department while teaching department classes.

#### Electrical Question of the Month

**This Month's Question:** Appliance branch circuit conductors must be provided with overcurrent protection in accordance with their ampacity as specified in NEC 240.4. The rating of an individual branch-circuit overcurrent device shall not exceed the protective device rating marked on the appliance. **A)** True, **B)** False.

**Last Month's Question:** Electrical maintenance of a household electric potable water heater in a dwelling unit is within the scope of work of all of the following electrical specialties, except: **A)** 02-residential, **B)** 06A-HVAC/refrigeration, **C)** 07-nonresidential maintenance, **D)** 07D-appliance repair. The answer is **B)** [WAC 296-46B-920(2)(f) and WAC 296-46B-020(28)(b)].

## Compliance Report

This report is a result of requests from you, our stakeholders and customers. The report is the first of a quarterly series listing the final judgments for: no electrical contractor's license, hiring uncertified electricians, no electrician certification, and failure to obtain necessary electrical work permits. Consumers and contractors will now have information about those who have violated the electrical laws regarding these issues. The report is also posted on the Electrical Program website.

The following firms and persons received a final judgment during the 4<sup>th</sup> quarter of 2003. A final judgment means that all rights of appeal have been exhausted and a penalty is due or has been paid.

# Final Judgments of the Electrical Laws For the 4<sup>th</sup> Quarter of 2003

VC o Luton	Penalty # of Amount Citations		
Violator	Amo	unt C	itations
NOTE: Penalty amounts may vary due to previous violations.			
Violation - No Electrical Contractor's License			
Region 1 – NW Washington	¢.	200	1
COLE, WARREN G, PO BOX, MOUNT VERNON, WA		200	1
COMPACTION & RECYCLING EQUIP, NE 122 AVE, PORTLAND, OR		500	1
DALTON, PAUL R, 139TH PL NE, MARYSVILLE, WA	\$ 1,		2
DRIFTWOOD COMMUNICATIONS INC, HANNEGAN RD, LYNDEN, WA	\$ 1,		1
FISHER, KEITH ALAN, 48TH DR NE, MARYSVILLE, WA		500	1
HAPPY HOUSE CONSTRUCTION CO, 121ST ST SE, EVERETT, WA		500	1
MILLER'S INC, 88TH AVE W, EDMONDS, WA		500	1
POWER CO OF WASH INC, THE, SMOKEY POINT BLVD, ARLINGTON, WA		500	1
SPENCE, SPENCER, 210TH ST SW, LYNNWOOD, WA		500	1
SUPERIOR ELECTRIC NW INC, PO BOX, BOTHELL, WA	\$ 3,	500	14
Region 2 – King County			
DELUX HOME SOLUTIONS, SE NEWPORT WAY, BELLEVUE, WA	\$	500	1
FULL HOUSE REMODELING, 236TH ST SW UNIT B, EDMONDS, WA	\$	500	1
HILLYARD HEATING, SW 99, SEATTLE, WA	\$	500	1
JET ELECTRIC, S MERIDIAN, PUYALLUP, WA	\$	500	1
NORTH PARK HEATING INC, BALLINGER WAY NE, SEATTLE, WA	\$	500	1
SUPERIOR HEATING, PO BOX, PUYALLUP, WA	\$	500	1
WHEELER, ALAN P, S E 196TH PL, RENTON, WA	\$	500	1
WU CONSTRUCTION LLC, NE 94TH ST, SEATTLE, WA	\$	500	1
Region 3 – Kitsap & Olympic Peninsulas			
ACCENT REFRIGERATION, PO BOX POST DEPOT 4, VICTORIA, BC	\$	500	1
D P A SIGNS, PO BOX, SEATTLE, WA	\$	500	1
GARCIA, BERT A, PO BOX, ORTING, WA	\$	500	1
ONSITE COMMERCIAL, NE 33RD PL, BELLEVUE, WA	\$ 4.	,500	9
PAYNE, JAMES, HIGH SIERRA LN NW, SILVERDALE, WA	\$	500	1
Region 4 – SW Washington			
CHANDLER ELECTRIC, SW CARSON, PORTLAND, OR	\$	500	1
COASTAL FINISHING SYSTEMS INC, S PEBBLE PL, BELLINGHAM, WA	\$	500	1
GUDYKA, BRUNO, 50TH AVE S, AUBURN, WA	\$	500	1
MACSHANE, ROBERT M, HELENA DR NE, BREMERTON, WA		500	1
Region 5 – Central Washington			
ERICKSON, WADE L, PO BOX, BREWSTER, WA	\$ 1	,000	2
MILANEZ, ADAN C, STASSEN WY, GRANDVIEW, WA		500	1
Region 6 – Eastern Washington	*		
A PUMP, N MONROE, DEER PARK, WA	\$	500	1
HOGAN, MICHAEL D, PO BOX, DAVENPORT, WA		500	1
RIVERSDALE BUILDERS LLC, ELK-CHATTAROY, ELK, WA		500	1
SUNDANCE EXCAVATING, INC., SUNDANCE DR, NINE MILE FALLS, WA		500	1
WARNER CONST, DRISKILL RD, NEWPORT, WA		500	1
Central Office	Ф	500	1
	¢	700	2
COLE, WARREN G, POBOX, MOUNT VERNON, WA	\$	700	2

Electrical Section Internet Address: www.lni.wa.gov/TradesLicensing/electrical

Page 3 of 6

ELECTRICAL CURRENTS		March 2004	
WALL STREET REFRIGERATION, PO BOX, ODESSA, WA	\$	500	1
WHITE, BRYCE L, PO BOX, STARTUP, WA	\$	1,000	2
Violation – Employing an Uncertified Electrician			
Region 1 – NW Washington			
MILLER'S INC, 88TH AVE W, EDMONDS, WA	\$	100	1
Region 2 – King County			
D L SPARKS, TOLT RIVER RD NE, CARNATION, WA	\$	100	1
Region 4 – SW Washington			
TAURUS ELECTRIC, 73RD AVE SE, OLYMPIA, WA	\$	500	1
Central Office			
ADVANCED ELEC & ALARM SYS INC, PO BOX, SPOKANE, WA	\$	100	1
AMTECH LIGHTING SERVICES, E ORANGEWOOD AVE, ANAHEIM, CA CHECKPOINT SECURTY SYSTEMS GROUP INC, SHADY OAK RD, EDEN	\$	600	6
PRAIRIE, MN	\$	400	4
D & S ELECTRIC INC, PO BOX, SUMNER, WA	\$	300	3
J R ELECTRIC INC, 188TH AVE SE, KENT, WA	\$	400	4
LAD IRRIGATION CO INC, PO BOX, MOSES LAKE, WA	\$	100	1
LINDBERG ELECTRIC CO INC, NICKERSON ST, SEATTLE, WA		1,400	4
PINKERTON SYS INTEGRATION INC, AVALON RIDGE PKWY, NORCROSS, GA		400	4
PINNACLE ELECTRIC INC, NW 50TH, SEATTLE, WA	\$	100	_
POWER PLUS ELECTRIC, EASTSIDE RD, MILTON-FREEWATER, OR	\$	200	2
SEA TAC ELECTRIC INC, S 220TH ST, KENT, WA	\$	100	1
STREAMLINE ELECTRIC, E 18TH ST, VANCOUVER, WA	\$	200	2
<u>Violation – Uncertified Electrician</u>			
Region 1 – NW Washington			
BOORSE, GORDON, NE 122ND AVE, PORTLAND, OR	\$	250	1
BOTROS, TALAT M, 37TH AVE SOUTH, TUKWILA, WA	\$	250	1
MILLER, ERIC H, 88TH AVE W, EDMONDS, WA	\$	100	1
RUSSELL, DANIEL L, S DAVIES RD, LAKE STEVENS, WA	\$	250	1
SCHWIGER, ANDREW LEE, 35TH AVE SW, SEATTLE, WA	\$	250	1
SPENCE, SPENCER, 210TH ST SW, LYNNWOOD, WA	\$	250	1
TREHERNE, SIDNEY J, 121ST ST SE, EVERETT, WA	\$	250	1
ZINKLE, GREG, AVE D, SNOHOMISH, WA	\$	100	1
Region 2 – King County	Φ.	2.70	
BASRA, SUKVED, PO BOX, KIRKLAND, WA	\$	250	1
DEVORE, JAMES R, SE 238TH ST, KENT, WA	\$	100	1
HUSEBY, SCOTT A, 10TH ST SW, PUYALLUP, WA	\$	250	1
JOHNSON, JOSHUA D, SW WALDEN DR, BEAVERTON, OR	\$	100	1
JOHNSON, RAVEN, TAYLOR AVE NW, RENTON, WA	\$	100	1
LUX, LOREN P, SE NEWPORT WAY, BELLEVUE, WA	\$	100	1
WEHRWEIN, LARRY J, NE 136TH PL, KIRKLAND, WA	\$	250	1
Region 3 – Kitsap & Olympic Peninsulas	Φ.	2.70	
COLLINS, STEPHEN B, CHICO WAY NW, BREMERTON, WA	\$	250	11
VANAUSDLE, RANDALL E, CARNE, PORT ANGELES, WA	\$	250	1
BREIEN, ROBERT A, COLUMBIA HGTS, LONGVIEW, WA	\$	250	1
Region 4 – SW Washington	<b>.</b>	100	
BUSH, WAYNE ALAN, ASH ST, FORREST GROVE, OR	\$	100	1
MACSHANE, ROBERT M, HELENA DR NE, BREMERTON, WA	\$	250	1

Electrical Section Internet Address: www.lni.wa.gov/TradesLicensing/electrical Page 4 of 6

ELECTRICAL CURRENTS	March 2004		
ROSEBORO, STANLEY G, LAKSONEN LP, SPRINGFIELD, OR	\$	250	1
VOSS, JEREMY A, PIONEER WAY, SHELTON, WA	\$	250	1
Region 6 – Eastern Washington			
HARRELL, LARRY, ELK CHATTAROY RD, ELK, WA	\$	250	1
HOGAN, MICHAEL D, PO BOX, DAVENPORT, WA	\$	250	1
WINLOW, DAVE, SUNDANCE DR, NINE MILE FALLS, WA	\$	250	1
Central Office			
COMAN, SHAD, N HAMILTON ST, SPOKANE, WA	\$	100	1
HODGIN, TYSON R, SE 13TH, MILTON FREEWATER, OR	\$	200	2
KNOWLDEN, TOM H, 227TH PL SE, MAPLE VALLEY, WA	\$	400	4
MANION, GREG, 22ND ST CT W, UNIVERSITY PLACE, WA	\$	600	6
MOE, CHRISTOPHER TODD, PO BOX, ORTING, WA	\$	100	1
MOLNER, PETER DAVID, 21ST AVE SW, SEATTLE, WA	\$	250	1
SLOAN, CHARLES L JR, 170TH AVE E, SUMNER, WA	\$	400	4
SMITH, DARL E, W NORA, SPOKANE, WA	\$	100	1
SMITH, JERROD R, 29TH AVE W, BRIER, WA	\$	650	5
THORNQUIST, PATRICK J, BOTHELL EVERETT HWY, BOTHELL, WA	\$	100	1
Violation – Failure to Obtain an Electrical Work Permit			
Region 1 - NW Washington			
A C ELECTRIC SERVICE INC, SW 43RD, RENTON, WA	\$	1,000	1
A-1 COMMUNICATIONS & ENTERTNMT, MITCHELL DR, LAKE STEVENS, WA	\$	500	2
ALL WAYS AIR CONTROL INC, S CENTER ST, TACOMA, WA	\$1	10,500	8
ALLIED SAFE & VAULT CO INC, W 2ND AVE, SPOKANE, WA	\$	250	1
B B & T SIGN SERVICES, BOTHELL-EVERETT HWY, MILL CREEK, WA	\$	250	1
BINGEL, RONALD D II, GILKEY RD, BURLINGTON, WA	\$	250	1
BRENNAN HEATING COMPANY INC, S 134TH PL, TUKWILA, WA	\$	250	1
CARDINAL HEATING & A/C INC, KIRKLAND AVE, KIRKLAND, WA	\$	250	1
CASCADE SATELLITE & SECURITY, W SR 20, SEDRO WOOLLEY, WA	\$	750	2
DEWS ELECTRIC LLC, PO BOX, BURLINGTON, WA	\$	1,000	4
EDWARDS, KELLY, CEDAR ROAD, LAKE STEVENS, WA	\$		1
ELECTRIC FURNACE CENTER INC, PO BOX, SNOHOMISH, WA	\$	250	1
EVERGREEN ELECTRICAL SRVCS INC, 60TH AVE WEST, EDMONDS, WA	\$	250	1
EVERSON, STEVE, 44TH AVE SE, SNOHOMISH, WA	\$	50	1
FUEL SYSTEMS ELECTRIC INC, SEATTLE HILL RD, SNOHOMISH, WA	\$		1
GRIFFIN, CHARLIE, ANDREW SATER RD, EVERETT, WA	\$		1
HENRY, DON, 123RD AVE NE, LAKE STEVENS, WA	\$		1
MARTENS BROS INC, PACIFIC HWY, BELLINGHAM, WA	\$	250	1
NORTHWEST MECHANICAL INC, NE 145TH ST, SHORELINE, WA	\$	250	1
OUR CHURCH MINISTRIES, PO BOX, GRANITE FALLS, WA	\$	250	1
PHILLIPS & SON ELECTRIC INC, PO BOX, FALL CITY, WA		1,826	22
POTELCO INC, 8TH ST E, SUMNER, WA	\$	250	1
SAFFOLD, HANK, 191ST ST SW, EDMONDS, WA	\$		1
SEAHURST ELECTRIC INC, SMITH AVE, EVERETT, WA		2,000	1
SIGN FACTORY INC, THE, 8TH ST, KIRKLAND, WA	\$	250	1
TROWBRIDGE, DAVID, GYLANY WAY, GREENBANK, WA	\$	50	1
Region 2 – King County		2-2	-
ADVANCED HEATING & COOLING INC, IVY ROAD, BREMERTON, WA	\$		1
ADVANCED WIRING SYSTEMS CORP., SANDY HOOK RD NE, POULSBO, WA	\$	250	1
ARONSON SECURITY GROUP INC, DEXTER AVE N, SEATTLE, WA	\$	1,000	1

Electrical Section Internet Address: www.lni.wa.gov/TradesLicensing/electrical Page 5 of 6

ELECTRICAL CURRENTS	March 2004	
BAYE HEATING & AIR COND INC, PO BOX, BELLEVUE, WA	\$ 250	1
BLACK HILLS INC, 85TH AVE SE A, OLYMPIA, WA	\$ 250	1
CARLSON SIGN CO, POBOX, BEND, OR	\$ 250	1
DIGITEC SECURITY SERVICES, 165TH ST CT E, PUYALLUP, WA	\$ 250	1
DUC THUAN JEWELRY, EAST VALLEY HWY, KENT, WA	\$ 250	1
FURNACE DOCTORS, 177 PL SW, LYNNWOOD, WA	\$ 250	1
GIESE, D JAY, WAX ROAD, COVINGTON, WA	\$ 250	1
HILLS BROTHERS ELECT CNTRS INC, SE 271ST PL, MAPLE VALLEY, WA	\$ 250	1
HUNG KY ASIA MARKET, EAST VALLEY HWY S, KENT, WA	\$ 250	1
HUNT, PAUL, PO BOX, PUYALLUP, WA	\$ 50	1
KIRBY ELECTRIC INC, B ST NW, AUBURN, WA	\$ 250	1
LE, XUAN, 3RD AVE S, SEATTLE, WA	\$ 250	1
MATRIX HOME THEATRE INC, 130TH AVE SE, KENT, WA	\$ 250	1
NEON SIGN SYSTEMS INC, URSULA PL S, SEATTLE, WA	\$ 1,000	1
O'BRIEN COMMUNICATIONS, SIMONDS RD NE, KENMORE, WA	\$ 250	1
OLYMPIC MECHANICAL INC, 66TH AVE W, MOUNTLAKE TERRAC, WA	\$ 250	1
PACIFIC RACEWAYS, 144TH AVE SE, KENT, WA	\$ 250	1
S & H ELECTRIC INC, 22ND AVE SE, OLYMPIA, WA	\$ 250	1
UNIVERSAL REFRIGERATION INC, PO BOX, AUBURN, WA	\$ 250	1
WASHINGTON ALARM INC, S JACKSON, SEATTLE, WA	\$ 1,000	1
Region 3 – Kitsap & Olympic Peninsulas		
CHEN, (JOHN) GUO ZHANG, PO BOX, FORKS, WA	\$ 250	1
COCHRAN INC, PO BOX, SEATTLE, WA	\$ 250	1
INDUSTRIAL ELECTR SPEC INC, OHIO ST, LONGVIEW, WA	\$ 1,500	6
KNOBLAUCH, DONALD, RIVERSIDE RD E, SUMNER, WA	\$ 250	1
MAXIMUM ELECTRIC INC, 265TH AVE SE, RAVENSDALE, WA	\$ 250	1
REGAN, MICHAEL, W HORTON, PORT HADLOCK, WA	\$ 500	2
SIGN SOLUTIONS INC, PO BOX, LACEY, WA	\$ 250	1
SOUTHERN PRIDE, FLORA ST, PORT HADLOCK, WA	\$ 250	1
Region 4 – SW Washington CAPITAL ELECTRIC INC, PO BOX, OLYMPIA, WA	¢ 250	1
CAPITAL ELECTRIC INC, PO BOX, OLYMPIA, WA CAPITAL SHEET METAL INC, PO BOX, LACEY, WA	\$ 250	1
DUNRITE MECHANICAL LLC, NW 25TH PLACE, BATTLE GROUND, WA	\$ 2,000 \$ 250	1 1
E C COMPANY, PO BOX, PORTLAND, OR	\$ 250 \$ 500	1
LEE, ALLEN, SR 409, CATHLAMET, WA	\$ 500 \$ 50	1
NAYDEN HEATING & A/C INC, NE 95TH ST, VANCOUVER, WA	\$ 250	1
ONALASKA ELECTRIC, PO BOX, ONALASKA, WA	\$ 250	1
UNIQUE DESIGNS INC, NE 100TH ST, VANCOUVER, WA	\$ 250	1
VITAL SIGNS ELECTRICAL INC, NE 10TH AVE, VANCOUVER, WA	\$ 250	1
Region 5 – Central Washington	Ψ 250	•
AKLAND PUMP/IRRIGATION CO INC, FRUITVALE BLVD, YAKIMA, WA	\$ 250	1
ERICKSON ELECTRIC, PO BOX, BREWSTER, WA	\$ 250	1
SONITROL OF SPOKANE INC, E TRENT, SPOKANE, WA	\$ 250	1
VANCE ELECTRIC, PO BOX, YAKIMA, WA	\$ 250	1
Region 6 – Eastern Washington	•	
RIVERSDALE BUILDERS LLC, ELK-CHATTAROY, ELK, WA	\$ 250	1
TRI STATE SIGN CO INC, N ALTAMONT, SPOKANE, WA	\$ 250	1
WARNER CONST, DRISKILL RD, NEWPORT, WA	\$ 250	1